published in Reader's Digest,
25 May 2016

link to Reader's Digest article [1]

lungs [2] cancer [3] digestion [4]



Cigarette smoke contains 98 dangerous chemicals capable of harming every organ in the human body; fruit and vegetables are rich in healthy nutrients. Can the latter really combat the harmful effects of smoking? Helen Cowan investigates.

An unequal battle?

In 2013, more than 45,000 new cases of lung cancer [5] were diagnosed in the UK. Lung cancer is the most common cancer [6] in the world and smoking accounts for 86% of cases.

Away from the lungs, smoking can inflame the heart, block the arteries, lead to depression and memory problems, cause facial, colon and bladder cancers, age the skin and slow down wound healing.

It's difficult to imagine any opponent capable of conquering the effects of cigarettes in the smoker's body—is it even worth considering healthy eating or should we throw in the towel and declare the cigarette the heavyweight champion as it wreaks its havoc inside the body?

Surprises from the studies

In Singapore, a large study [7] found that non-citrus fruit (apples, pears and grapes) reduced smokers' cough; in Japan [8], fruit and vegetable consumption was reduced in people with COPD [9]. It takes a lot of puff to eat an apple though—could it be that the reduced fruit intake by breathless people was a consequence rather than a cause of their lung disease?

The appropriately-named EPIC study [10], involving about half a million people, suggests that fruits and vegetables really might protect the lungs from cigarette damage: In current smokers, lung cancer risk really did reduce by up to 46% with higher fruit and vegetable consumption—though intriguingly, cabbage, onion and garlic offered no protection.

Help from hormones?

No-one really knows how fruit and vegetable work their magic in the lungs: is it the vitamins? Are anti-inflammatory or anti-oxidant substances involved?

Dr Margaret Spitz [11] and her team at the University of Texas extol the oestrogen-like activity in foods such as carrots, broccoli, spinach, sprouts and beans. Inspired by the finding that oestrogen hormone therapy in women significantly reduced cases of lung cancer (while nicotine can fuel tumour growth by promoting the formation of new blood vessels), they showed that fruit and vegetable consumption lowered the risk of lung cancer in smokers and non-smokers.

It is thought that plant oestrogens might interfere with your body's oestrogen, preventing it from feeding the tumour (many tumours depend on oestrogen to grow: chemotherapy drugs such as Zoladex [12] also work to stop oestrogen in its tracks).

The final victory

Even if fruit and vegetables are able to mount some counterattack against tobacco toxins, the harms of smoking throughout the body are still likely to be extensive. And smoking a shisha pipe [13] won't help either: even though it mixes tobacco with fruit, studies show that you can inhale the amount of smoke found in 100 cigarettes during a shisha session.

The most effective way to avoid harm from smoking is to quit [14]. Professor Iain Hutchison, consultant oral surgeon used to 'saving faces [15]' damaged by smoking, gave up smoking when he was 13 and teaches school children [16] about the dangers.

There will, however, always be the exception: my grandad smoked a lot, ate little fruit and outlived my other grandparents.

MEDICAL JOURNALISTS' ASSOCIATION

Source URL:https://www.helencowan.co.uk/can-healthy-eating-undo-damage-smoking

Links
[1] http://www.readersdigest.co.uk/health/health-centre/can-healthy-eating-undo-damage-smoking [2] https://www.helencowan.co.uk/../tags/lungs [3] https://www.helencowan.co.uk/../tags/cancer [4] https://www.helencowan.co.uk/../tags/digestion [5] http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/lung-cancer/incidence [6] http://www.who.int/mediacentre/factsheets/fs297/en/ [7] http://www.ncbi.nlm.nih.gov/pubmed/15117740 [8] http://www.ncbi.nlm.nih.gov/pubmed/19555711 [9] http://www.copdfoundation.org/What-is-COPD/Understanding-COPD/What-is-COPD.aspx [10] http://www.ncbi.nlm.nih.gov/pubmed/17487840 [11] https://www.pcrm.org/health/cancer-resources/diet-cancer/type/lung-cancer [12] http://www.readersdigest.co.uk/health/health-centre/everything-you-need-know-about-zoladex [13] https://www.bhf.org.uk/heart-health/risk-factors/smoking/shisha [14] http://www.readersdigest.co.uk/health/health-centre/break-habit-smoking-cigarettes [15] http://www.savingfaces.co.uk/ [16] http://www.hippocraticpost.com/cancer/i-gave-nicotine-i-13/